In the Claims:

This listing of the claims replaces all previous versions, and listings, of the claims.

1. (Currently amended) A tissue culture system comprising:

(a) at least one ~~isolated~~ neural stem/progenitor cell isolated from subependymal zone or hippocampus, ~~cell~~ expressing at least one LPA receptor;

(b) a lysophosphatidic acid (LPA) compound selected from the group consisting of LPA 20:5, 18:1 (oleoyl), 16:0 (palmitoyl), and 14:0 (myristoyl) at a concentration range from 1 µM to 50 µM; and

(c) a basal culture medium comprising insulin and methyl cellulose, but free of EGF or FGF2.

2. (Cancelled)

3. (Original) The tissue culture system of claim 2, wherein the form of said LPA compound is 18:1 (oleoyl) or 16:0 (palmitoyl).

4. (Cancelled)

5. (Currently amended) The tissue culture system of claim [4]1, wherein said neural stem/progenitor cell is situated within a neurosphere.

6. (Currently amended) The tissue culture system of claim [4]1, wherein said neural stem/progenitor cell is derived from a mammal.

7. (Original) The tissue culture system of claim 6, wherein said mammal is a mouse.

8. (Currently amended) The tissue culture system of claim 6, wherein said mammal is a postmortem human.

9. (Currently amended) The tissue culture system of claim 1, wherein said LPA receptor expressed by said neural stem/progenitor cell is selected from the group consisting of an LPA1, LPA2, and LPA3 receptor.

10. (Original) The tissue culture system of claim 1, wherein said stem/progenitor cell expresses at least one of a Sca-1 and an AC133 antigen, and at least one of an LPA1, LPA2 and LPA3 receptor.

11. (Original) The tissue culture system of claim 10, wherein said stem/progenitor cell further expresses at least one marker of neuronal differentiation selected from the group consisting of β-III tubulin, and nestin.

12. (Withdrawn) A method of culturing at least one neurosphere from isolated brain cells, the method comprising the steps of: (a) providing at least one isolated brain cell; and (b) culturing said at least one brain cell in a medium containing a lysophosphatidic acid (LPA) compound under conditions that allow for growth and differentiation of a neurosphere from said isolated brain cell.

13. (Withdrawn) The method of claim 12, wherein the step (b) of culturing the at least one brain cell under conditions that allow for growth of a neurosphere further allows for proliferation and differentiation of the cells within said neurosphere into at least one cell type selected from the group consisting of a neuron, an astrocyte and an oligodendrocyte.

14. (Withdrawn) The method of claim 13, wherein said at least one cell type is a neuron, wherein at least one lineage-specific marker is expressed by said cell, said marker selected from the group consisting of β-III tubulin and nestin.

15. (Currently amended) An isolated neural stem/progenitor cell cultivated in a basal culture medium comprising a lysophosphatidic acid (LSA) compound selected from the group consisting of LPA 20:5, 18:1 (oleoyl), 16:0 (palmitoyl), and 14:0 (myristoyl) at a concentration range from 1 μM to 50 μM, wherein said medium comprises insulin and methyl cellulose, but is free of EGF or FGF2.

16. (Cancelled)

17. (Cancelled)

18. (Currently amended) The isolated neural stem/progenitor cell of claim 17, wherein the form of said LPA compound is LPA 18:1 (oleoyl) or LPA 16:0 (palmitoyl).